



Boulder County Building Services

A division of Administrative Services

West Wing Courthouse • 2020 13th Street, 2nd Floor • Boulder, Colorado 80302 • Fax: 303.441.1718

Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 • www.bouldercounty.org •

October 4, 2013

City of Boulder Planning and Development Services
1739 Broadway
Boulder, CO 80302

Attn: Sloane Walbert

This letter presents the City's comments and the Applicant's response to the review submittal referenced herein. These responses accompany the Technical Document Review resubmittal for case # TEC2013-00046.

Please do not hesitate to contact me if you have any questions or comments.

Sincerely,

Brian Tewey
Boulder County Administrative Services Department
Building Services Division
2020 13th St.
Boulder, CO 80302
303-441-3957
303-441-1718 Fax
btewey@bouldercounty.org

**Boulder County Coroner Facility
Tec Doc Review Comment Responses**
October 4, 2013

**CITY OF BOULDER
TECHNICAL DOCUMENT REVIEW RESULTS AND COMMENTS**

DATE OF COMMENTS:	August 2, 2013
CASE MANAGER:	Sloane Walbert
PROJECT NAME:	BOULDER COUNTY CORONER FACILITY
LOCATION:	5600 FLATIRON PKWY
COORDINATES:	N04E01
REVIEW TYPE:	Utility Plan, Stormwater Plan, Final Landscaping
REVIEW NUMBER:	TEC2013-00046
APPLICANT:	Brian Tewey, Boulder County
DESCRIPTION:	TECHNICAL DOCUMENT REVIEW including final landscaping, photometric plan, utility plan, and stormwater plan and report for the Boulder County Coroner facilities at the south end of the Boulder County Sheriff site.

I. REVIEW FINDINGS

Plan set revisions are required in order for the Technical Document plan set to meet all applicable review criteria. Please submit five copies of the revised plan set to a Project Specialist for routing and review. Note that while revisions are accepted at any time, they are only routed for review on the first that third Mondays of each month.

Plan set revisions are included with Tec Doc resubmittal. Per request by the case manager (Sloane Walbert), three hard copies and a disc with digital copies are being submitted.

TEC Documents

At the request of the Case Manager after final revisions/corrections have been approved, two (2) copies of all architecture and landscape plans and three (3) copies of the corrected engineering plans must be provided to the Case Manager for final approval. The Case Manager will forward the engineering sets to the applicable engineering reviewers.

One set of each plan will be returned to the applicant for use with all building permit plans. These returned plans will indicate approval with approval stamps from the Land Use Review Manager and the Engineering Review Manager. Copies of these exact sets must be submitted and attached to all subsequent building permits.

Any and all changes made to the approved (stamped/signed) plans for building permit shall be redlined and written documentation provided on the plan sets showing the changes or pages to be reviewed for changes. Changes must be first discussed and presented to the Case Manager for consideration, since certain changes may require a minor modification, or in more limited circumstance, a Site Review amendment. Delays in the building permit reviews can be expected if this information is not provided. Upon resubmittal of the final plans, please also provide a written statement that this section has been read and understood.

Acknowledged. Any subsequent changes to the approved plans shall be discussed and documented as stated above.

II. CITY REQUIREMENTS

Access/Circulation, David Thompson, 303-441-4417

1. Per section 8-2-17(b)(5), Boulder Revised Code 1981 (B.R.C.) the existing 5-foot wide sidewalk along Flatiron Place must be replaced with a 6-foot wide sidewalk. Revise the site plan accordingly.

Plans have been revised as requested to include replacement of the existing sidewalk. Re: Sheet C2.01.

2. Per section 8-2-17(b)(5), B.R.C. 1981, the existing curb ramps must be replaced with a CDOT standard curb ramp with truncated domes. The curb ramp on the west side of the driveway must also provide a 4-foot landing area between the street sidewalk and the driveway sidewalk. Revise the site plan accordingly.

Plans have been revised as requested to include replacement of existing curb ramps, including addition of detectable warnings (truncated domes) per City Standards. Landing area will be provided between the two adjoining sidewalks on the east side of the driveway (comment incorrectly references this as being on the west side).

Addressing, Sloane Walbert, 303-441-4231

The City is required to notify utility companies, the County Assessor's office, emergency services and the US Post Office of proposed addressing for development projects. Please propose an address for the new building.

Applicant is proposing that the address for the new Coroner building be designated as 5610 Flatiron Parkway. Proposed address is consistent with those existing in the surrounding business park and will share the same street access as the Sheriff building at 5600. See attached building address aerial photo.

Drainage, Jessica Stevens, 303-441-3121

1. Section 7.13(C) of the City of Boulder Design and Construction Standards (DCS) requires all proposed projects and developments, to provide water quality capture volume in accordance with the Urban Drainage and Flood Control District (UDFCD) Criteria Manual. Basins A1 and A2 do not drain to the water quality facility and enter Dry Creek Number 2 Ditch without receiving water quality treatment. Runoff from basins A1 and A2 must be treated for water quality. Please revise the water quality design and to meet the requirements of the UDFCD Criteria Manual.

An STC 900 Stormceptor has been added to the existing storm sewer line north of the proposed building. The proposed Stormceptor will treat the onsite drainage from basins A1 and A2. Due to the proposed onsite grading, these basins flow to the north and are not captured and treated in the rain garden/bio-retention facility to the south.

2. The channel velocities used for both historic and proposed conditions appear to be associated with travel time in a grassed waterway. The velocities associated with paved areas should be used. Please revise the report accordingly.

Channel velocities have been changed to reflect 3ft/s.

3. Please review the overland flow length, channel flow length and location of the first design point for basin A3. The first design point should be located at the point where runoff first enters the storm sewer system, or the water quality facility.

Design Point A3 has been relocated to the entrance of the rain garden/bio-retention.

4. The water quality facility has been referred to as a water quality pond in the plan set and porous landscape detention/rain garden/bio-retention facility within the drainage report. Please revise the report and plans for consistency.

The plans have been updated to be consistent.

5. An inlet structure has been shown as detail 2 on Sheet C6.04. Please clarify the location of the proposed inlet structure. The detail appears to be associated with the pond outlet structure but it is unclear.

The inlet structure detail 2 shown on C6.04 is a portion of the outlet structure. The detail has been moved to sheet C6.05 to clarify the intention of the detail.

6. The Grading and Drainage Plan, Sheet C3.03 refers to a pond detail found on Sheet C5.05. The plan set does not include a Sheet C5.05. The reference appears to be associated with Sheet C6.05. Please revise the plans accordingly.

Plans have been revised as requested.

7. For rain gardens with concentrated points of inflow the Urban Drainage and Flood Control District Criteria Manual suggests providing energy dissipation to minimize subsidence. Please address energy dissipation for the proposed rain garden.

Concrete rundowns have been added in order to provide energy dissipation.

8. The design for an emergency overflow weir has been included in the drainage report. The weir has also been referred to in detail 4 on Sheet C6.05. Staff has been unable to find details for construction of the weir within the plan set. Please include grading details for the construction of the weir upon resubmittal.

Plans have been revised as requested.

9. Portions of the site drain toward the existing Boulder County Sherriff building. Please indicate how sediment transport onto the Boulder Country Sherriff site will be minimized on the Stormwater Management Plan, Sheet C3.05.

Erosion control measures have been added to the plans. A silt fence has been added to the north and south portion of the existing parking lot to reduce any sediment transport to the existing building. In addition there is inlet protection at all curb cuts and existing inlets.

10. Please clarify the hatching shown over the proposed porous landscape detention area in the Stormwater Management Plan legend.

The hatching shown over the proposed porous landscape detention has been added to the overall legend on Sheet C1.01.

11. City records indicate that the storm sewer pipe located to the south of the Boulder County Sherriff's Office is 21 inches. Please verify that the pipe size information provided throughout the plan set is correct.

The storm sewer pipes have been updated on the plans to be an existing 21" and 24" storm sewer pipe. See Sheet C3.01.

12. The applicant has proposed the construction of a water quality facility within the electrical transmission line easement and right-of-way. Written approval from the easement owner is required prior to approval of the engineering construction drawings.

An easement encroachment license agreement has been received from Xcel Energy for this transmission line easement. A copy of this agreement is included with this resubmittal.

Engineering, Jessica Stevens, 303-441-3121

Please provide a copy of all source survey information used in the preparation of the construction documents.

Copies of prior site surveys are included with this resubmittal.

Fees, Sloane Walbert, 303-441-4231

Please note that 2013 development review fees include a \$131 hourly rate for reviewer services following the initial city response (these written comments). Please see the P&DS Questions and Answers brochure for more information about the hourly billing system.

Applicant has confirmed with P&D that review fees are waived for Boulder County per paperwork submitted with Tec Doc application.

Landscaping, Elizabeth Lokocz, 303-441-3138

No comments at this time.

Acknowledged.

Lighting, Sloane Walbert, 303-441-4231

Redevelopment on this property exceeds seventy-five percent of the Boulder County Assessor's actual value of the existing structure and all exterior lighting on the site must come into compliance with the outdoor lighting requirements of section 9-9-16 "Outdoor Lighting," B.R.C. 1981. Please address the following items:

1. Please include the height of all proposed and existing light poles on the property. The maximum allowable pole height, including base, pole and luminaire, is 25 feet in parking lots.

On Sheet E1.02, the cut sheet title for "AA", "BB" and Existing Pole Mounted Luminaires indicates a 25'-0" height. In addition, this has been noted on Sheet E1.01.

2. Light levels at the north property line on Flatiron Parkway exceed the maximum of 0.2 footcandles. The light fixture causing the elevated light levels is shown as "existing" on the photometric plan but is not shown on the landscape plan. Revise accordingly.

This existing fixture has previously been equipped with a shielding device to reduce light spillage, and thus is already in compliance. Photometric calculation and luminaire schedule have been revised to reflect this condition. This is also the case for the existing fixture at the west side of this north parking lot.

3. Light levels exceed the maximum allowable levels in the following locations. The maximum allowable light levels for this zone district are 5.0 footcandles for building entries and parking areas, 3.0 footcandles along pedestrian walkways, and 2.0 in outdoor storage areas.

a. DD fixture on west side of building has readings of 6.1 and 2.5 footcandles;

Footcandle levels have changed at this location due to change in fixture mounting height.

b. FF fixture on south side has readings of 4.1, 4.1, 3.6 footcandles; and

This area is at the building entry, and the FF fixtures are underneath the entry canopy.

c. CC fixture on northeast corner has a reading of 3.5 footcandles.

Footcandle levels have changed slightly due to fixture modifications at east end of building.

4. The maximum uniformity ratio (maximum to minimum) for this zone district is 10:1. The fixtures in parking area 1, 2, and 3 exceed this amount. Please provide the uniformity ratio for all proposed and existing fixtures.

The two existing Sheriff parking areas are already in compliance with uniformity ratio requirements, as is the new Coroner parking area #1. Minor changes have been made to the proposed lighting in parking areas #2 (relocated pole light) and #3 (additional pole light), which will bring their uniformity ratios within compliance. See revisions on Sheet E1.01.

5. Provide documentation that all proposed and existing light fixtures are fully-shielded.

On Sheet E1.02, the cut sheet titles for all luminaires indicate full cutoff style (i.e. fully shielded). The technical specs shown for the pole fixtures and wall-mount fixtures also indicate full cutoff, and the "FF" fixtures are fully recessed can lights underneath the entry canopy.

Utilities, Jessica Stevens, 303-441-3121

1. It appears that the existing five foot easement along the western property line was dedicated as a drainage easement. Additional utility easement must be dedicated to allow for construction of the water main. Utility easement dedication will also be required on Lot 7 of Flatiron Industrial Park West.

A new 25 foot wide utility easement will be provided for the new water main, including a portion of which will cross into the adjacent property for connection near the existing hydrant location. A utility easement dedication is being submitted under separate Tec Doc review.

2. Utility easements for fire hydrants shall be a minimum of 25 feet in width and extend at least 10 feet beyond the hydrant assembly as required by section 5.10(A) of the DCS. Please revise the Utility Plan to indicate that the 10 feet behind the assembly will be provided.

Utility plan C3.04 has been revised to show the 10 foot easement length beyond the hydrant.

3. Easement dedications must be submitted through the Technical Document Review for easement dedication application available online or in the Planning and Development Services Center, 1739 Broadway, 3rd Floor.

An easement dedication is being submitted under separate Tec Doc review.

4. Please include the proposed locations of all telecommunication and gas lines on the Utility Plan, Sheet C3.04 upon resubmittal.

Utility Plan C3.04 has been revised to show the proposed telecommunication and gas line locations. Telecommunication connections (copper and fiber) will be made into the south end of the existing Sheriff building via existing underground pipe. Gas connection will be made to existing service on east side of existing Sheriff building. Applicant is currently coordinating with Xcel Energy regarding this gas line.

III. INFORMATIONAL COMMENTS

Area Characteristics and Zoning History, Sloane Walbert, 303-441-4231

The property was previously developed for use by Fresh Produce Sportswear as a warehousing center and administrative offices. Fresh Produce was granted a parking deferral for 77 parking spaces in 2004 (see ADR2004-00048). The Boulder County Sheriff's Office purchased the property and located in the existing structure in 2011. The County is proposing a 9,275 square foot one-story building on the south end of the site to house the office and morgue functions of the Boulder County Coroner. An application for an administrative parking reduction has been submitted concurrent to the technical document review (see ADR2013-00147).

Acknowledged.

Drainage, Jessica Stevens, 303-441-3121

A construction storm water discharge permit is required from the State of Colorado for projects disturbing greater than 1-acre. The applicant is advised to contact the Colorado Department of Public Health and Environment.

Acknowledged.

Engineering, Jessica Stevens, 303-441-3121

1. The applicant is notified that any groundwater discharge to the storm sewer system will require both a state permit and a city agreement. The steps for obtaining the proper approvals are as follows:

Step 1 -- Identify applicable Colorado Discharge Permit System requirements for the site.

Step 2 -- Determine any history of site contamination (underground storage tanks, groundwater contamination, industrial activities, landfills, etc.) If there is contamination on the site or in the groundwater, water quality monitoring is required.

Step 3 -- Submit a written request to the city to use the municipal separate storm sewer system (MS4). This submittal should include a copy of the Colorado Department of Public Health and Environment (CDPHE) permit application. The written request should include the location, description of the discharge, and brief discussion of all discharge options (e.g., discharge to MS4, groundwater infiltration, off-site disposal, etc.) The request should be addressed to: City of Boulder, Stormwater Quality, 4049 75th St, Boulder, CO 80301 Fax: 303-413-7364.

Step 4 -- The city's Stormwater Quality Office will respond with a DRAFT agreement, which will need to be submitted with the CDPHE permit application. CDPHE will not finalize the discharge permit without permission from the city to use the MS4.

Step 5 -- Submit a copy of the final discharge permit issued by CDPHE back to the City's Stormwater Quality Office so that the MS4 agreement can be finalized.

The above steps are acknowledged and will be taken if required; however, groundwater discharge will likely be unnecessary on this project given the existing water table and the extent of excavation expected during the construction phase.

For further information regarding stormwater quality within the City of Boulder contact the City's Stormwater Quality Office at 303-413-7350. All applicable permits must be in place prior to building permit application.

Acknowledged. A storm water discharge permit will be obtained prior to building permit application.

2. No portion of any structure, including footings and eaves, may encroach into any public right-of-way or easement.

Acknowledged. There are no portions of any proposed structures within the easements on this site.

Flood Control, Jessica Stevens, 303-441-3121

1. The property is impacted by the 100-year floodplain of Boulder Creek as indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map. The City of Boulder has adopted a revised floodplain study for Boulder Creek which has revised the floodplain designation of the property to 500-year floodplain. The revised study has been submitted to FEMA for review and adoption. The more restrictive study in place at the time of building permit will apply to development of the property. Any development within the 100-year floodplain is subject to the city's floodplain regulations and requires the approval of a floodplain development permit.

Acknowledged.

2. The proposed non-residential buildings must be floodproofed or elevated at least two feet above the projected 100-year flood event (flood protection elevation, FPE). New parking areas will need to be in compliance with section 9-3-3(a)(8), B.R.C, which states that no person shall establish an area for automobile parking in any portion of the floodplain where flood depths exceed eighteen inches.

Acknowledged.

Landscaping, Elizabeth Lokocz, 303-441-3138

In an effort to achieve a high quality enduring landscape, staff asks the applicant and all contractors to become familiar with the requirements of Chapters 3 and 10 in the Design and Construction Standards as they relate to the construction phase of the proposed project. Areas of particular concern include the effects of site grading, stockpiling and compaction on existing trees (Chapter 3) and the appropriate seasons for planting (Chapter 10). A general understanding of these specific areas of concern can significantly streamline the project inspection and certificate of occupancy phases. DCS Link: http://www.bouldercolorado.gov/index.php?option=com_content&task=view&id=209&Itemid=482.

Acknowledged. Construction phase BMP's will be followed to safeguard existing and newly installed plantings. Boulder County Building Services is responsible for installation and ongoing maintenance of all landscaping on its properties.

Due to the changing weather patterns and necessity to have extended planting seasons, most plant materials require some winter watering. Newly planted trees are especially susceptible to root damage if no supplemental water is provided. Colorado State University Extension is an excellent resource for the latest research regarding the correct winter water application rates (<http://www.ext.colostate.edu/pubs/garden/07211.html>). Construction is often associated with periods of prolonged and extensive site work during which no automated irrigation system is in place. Automated irrigation systems should remain operational, until site work commences when possible. During construction, plant materials to be preserved on the site and in the adjacent right of way must receive sufficient irrigation to remain in good condition.

Acknowledged as above.

Staff is available during any stage of the review process to provide information and resources as needed.

Parking, Sloane Walbert, 303-441-4231

Please see associated administrative parking reduction request ADR2013-00147.

Applicant has addressed comments for this request through separate correspondence.

Utilities, Jessica Stevens, 303-441-3121

1. The applicant is advised that at the time of building permit application the following requirements will apply:

a. The applicant will be required to provide an accurate proposed plumbing fixture count to determine the size of the proposed meters and services.

Acknowledged.

b. Water and wastewater Plant Investment Fees and service line sizing will be evaluated.

Acknowledged.

c. Since the building will be sprinklered, the approved fire line plans must accompany the fire sprinkler service line connection permit application.

Acknowledged.

2. The applicant is advised that at the time of right-of-way permit application the following requirements will apply:

a. All water meters are to be placed in city R.O.W. or a public utility easement, but meters are not to be placed in driveways, sidewalks or behind fences.

The proposed water meter will be located in the landscaped area within the new utility easement on the north side of the new building, as shown on Sheet C3.04.

b. Backflow prevention assemblies are required for all domestic water service lines, fire sprinkler systems, and irrigation service lines.

Backflow preventers will be provided on these water services to the new building.

c. On site meeting with the R.O.W. Inspector will be required before work begins.

A meeting with the ROW inspector will be arranged before start of construction.

d. Bikepath/sidewalk areas cannot be closed during construction.

Sidewalk areas will not be closed with the exception of the limited time required for replacement of the existing sidewalk at the north end of the property.

e. The public R.O.W. adjacent to the site must be kept free and clear of mud and debris that result from construction activities related to the project.

With the exception of the above-referenced sidewalk replacement, all construction work will be at the south end of the property. Mud and debris will be controlled using construction BMP's to limit public ROW disturbance.

f. The applicant will be responsible for the satisfactory repair or restoration to City Standards of any public infrastructure (curbs, sidewalks, paving, landscaping, utilities, etc.) damaged during construction.

Acknowledged.

3. All water meters are to be placed in city R.O.W. or a public utility easement, but meters are not to be placed in driveways, sidewalks or behind fences.

Acknowledged as above in 2.a.

Zoning, Sloane Walbert, 303-441-4231

The property is located in an Industrial - General (IG) zone district, which is described as "general industrial areas where a wide range of light industrial uses, including re-search and manufacturing operations and service industrial uses are located." Governmental facilities are an allowed use by right in the IG zone district.

Acknowledged.

IV. CONDITIONS ON CASE

Not applicable.